Nature Connections

News and Events from the Missouri Department of Conservation • July/August 2016



Hydrilla



Stop The Invasion

Hydrilla (*Hydrilla verticillata*) is a federally listed noxious weed that can be detrimental to our aquatic resources. It is native to the Indian subcontinent and was introduced to the United States in the early 1950s through the aquarium trade. Hydrilla was first discovered in Missouri in 2012 in a private pond in Greene County. It has since been found in Dallas, Warren, and St. Louis counties. Inspections and outreach efforts have been integral to finding other locations. Today, Greene County leads the state with twenty-six small impoundments having hydrilla.

What is hydrilla?

Hydrilla is a submerged aquatic plant that can quickly choke out aquatic habitats by forming dense mats. No aquatic habitat is immune from being impacted by hydrilla. It can grow in a variety of freshwater systems including streams, drainage ditches, and large reservoirs. Depth and water clarity are not a deterrent. Hydrilla needs very little light and grows in areas that are inhospitable for many native aquatic plants. In clear water, hydrilla has been found in areas over thirty-feet deep. Under ideal conditions hydrilla can grow an inch per day, and it can move throughout a watershed with ease.

Fragmentation is the primary means for its spread and it only takes one small piece of plant entering a waterbody to start a new stand. Plant fragments can "hitch a ride" on boat trailers,

fishing gear, waterfowl, and other wildlife. Hydrilla can even be introduced into another waterbody by relocating fish and other aquatic plants from hydrilla-infested waterbodies. Particularly in urban areas, aquarium dumping is another common method of introduction.

Besides fragmentation, hydrilla also uses tubers and turions for propagation. Tubers are subterranean potato-like structures that are produced by the plant. Under ideal conditions, approximately six thousand tubers can be produced per square meter. Depending on the variety of hydrilla, the tubers can stay viable in the soil for four to ten years. Tubers can also be

ingested by waterfowl and regurgitated at new locations. Turions are overwintering buds that fall and lay on the surface of the sediment and only survive about eight months, providing another avenue for producing new plants the following spring. Hydrilla does produce seeds, but

they play a minimal role in new plant generation. The persistence of this invasive plant's tubers and multiple methods of propagation have given the plant the "perfect weed" label.

Hydrilla

Why is it bad?

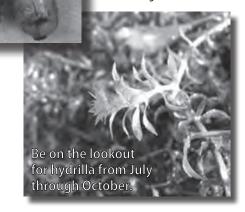
Hydrilla displaces the local aquatic plant community, interferes with boating and fishing, clogs water intake systems, and adversely changes the dynamics of fish populations. In places that have hydrilla, pond owners and lake managers are faced with expensive control measures. In short, this plant is not only detrimental to small ponds and lakes, it can impact our float streams and large reservoirs. If allowed to spread, it will harm Missouri's economy by hindering fishing and other recreational uses of our waters. Drinking water and power generation can also be impacted if their source water supplies become infested.

Hydrilla is just not a hindrance to aquatic life, but can also impact waterfowl and raptors. Hydrilla is a host plant to cyanobacterium that yields a toxin linked to Avian Vacuolar Myelinopathy or AVM. This is a neurological disease that is fatal to waterfowl and those that prey on them. In areas where AVM was prevalent, removal of hydrilla plants eliminated AVM deaths in waterfowl and raptors.

In Missouri, anglers and water-based recreationalists should be on the lookout for hydrilla from July through October. It disappears during the winter months and then starts to re-emerge in early May. By early July the plants

are readily visible and will continue to grow and top out at the water's surface through early November.

Once established, hydrilla is difficult to eradicate. It takes at least five years of successful, season-long control to rid a



site of hydrilla, partly due to the longevity of the subterranean tubers. This means **prevention is crucial**. Please see the accompanying article on page 7 for prevention methods.

For further information about hydrilla and identification characteristics, please visit <<u>short.mdc.mo.gov/ZkX</u>>. If you see the plant, please contact your local Missouri Department of Conservation office.

—Kara Tvedt Fisheries Management Biologist

Joplin Office in the Wildcat Glades Conservation & Audubon Center

201 W. Riviera Drive, Suite B, Joplin, MO 64804 • mdc.mo.gov/wildcat



The Joplin Conservation Office, located in the Wildcat Glades Conservation & Audubon Center, is your local connection to Missouri's fish, forests, and wildlife. Stop by and purchase hunting and fishing permits, attend a nature program, go for a hike, enjoy a picnic, or access Shoal Creek. Within the 190 acres of Wildcat Park, you will find a diverse mix of wildlife habitats rich with flora and fauna. From I-44, take exit 6, and turn south on MO-86. Turn right on Riviera Drive to enter Wildcat Park.

JOPLIN OFFICE HOURS:

Monday-Friday: 8 AM-5 PM Closed all state holidays.

AUDUBON CENTER HOURS:

Tuesday-Saturday: 9 AM-5 PM Sunday: 1–5 PM (March–October)

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-629-3423** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

July and August Events

Basic Archery

July 18 • Monday • 6–8 PM Walter Woods Conservation Area (Joplin) Registration required (ages 7 and up with an adult mentor)

Learn the fundamental skills and safety of archery. We will cover bow nomenclature, hand set, bow set, pre-draw, stance, and much more. Join in the fun as you discover the basics of archery, learn how to hone your shooting skills, and start to enjoy this lifelong activity. All equipment will be provided.

July and August Events_

Shoal Creek Cleanup

July 30 • Saturday • 8 AM-1 PM Shoal Creek (Joplin) Registration required (experienced paddlers ages 13 and up; ages 13-17 must be accompanied by an adult) Paddle your way down the creek in your canoe or kayak and help us put the "bash on trash." Join various Missouri/Kansas conservation

partners including area landowners, Southwest Ozarks Stream Teams, Missouri Department of Conservation, and Audubon Missouri to help keep our waterways clean. A limited number of canoes will be available to adults and teens with canoeing experience.

Water Festival Fishing Derby

August 13 • Saturday • 8–10 AM Walter Woods Conservation Area (Joplin)

Reaistration required (all ages: ages 15 and younger must be accompanied by an adult mentor) Kids will have the chance to catchand-release fish and register for prizes. Awards and prizes will be given away at the Shoal Creek Water Festival following the derby. All equipment, tackle, and bait will be provided. Fishing slot times are limited



August 13 • Saturday • 9 AM-3 PM Wildcat Glades Conservation & Audubon Center (Joplin)

No registration required (all ages) Cool off at the Shoal Creek Water Festival as we celebrate the 100th anniversary of Wildcat Park. Join us for this partnership event at the creek in Wildcat Park for a day of water fun. Take a dip in Shoal Creek in your cardboard boat, cheer your duck on to victory during the duck race, and enjoy a nature program with the kids. Discover nature and learn about conservation, water quality, and ecology at one of our water activity booths as you stroll along the creek!

Effective Wing Shooting For The Hunter

August 13 • Saturday • 9 AM-3 PM Shawnee Trail Conservation Area (Mindenmines)

Registration required (experienced shotgun hunters ages 15 and up; ages 15–17 must be accompanied by an adult mentor) Join the staff of the Missouri Department of Conservation for this wing shooting workshop. This is a free workshop that will help migratory and upland bird hunters improve their hunting skills with nontoxic shot. Topics include how to select the best ammunition and choke combination for hunting, how to improve your shooting skills, general information on the latest nontoxic shotgun ammunition, how to improve your range and distance estimation skills, and how to properly

pattern your shotgun. Participants should bring their hunting shotgun and choke tubes if applicable, nontoxic shotgun ammunition they wish to pattern, eye/ ear protection, a stool or chair, and a sack lunch and drink. Clay targets and 12- and 20-gauge nontoxic practice ammunition will be provided.

Youth Dove Pre-Hunt Workshop

August 31 • Wednesday • 7–9 PM

Youth Dove Hunt

September 3 • Saturday • ONE HOUR BEFORE SUNRISE

Shawnee Trail Conservation Area (Mindenmines)

Registration required (only hunter-education certified youth ages 11–15 with an adult mentor) To attend the *Youth Dove Hunt*, participants must attend the Youth Dove Pre-hunt Workshop at the Shawnee Trail Shop. This will include instruction on firearm safety, bird identification, shooting techniques, and dove management. Youth must be hunter-education certified and registered to attend. Space is limited.

Holiday Closing: July 4 • Independence Day

Missourians care about conserving forest, fish, and wildlife.

Andy Dalton Shooting Range and Outdoor Education Center

4897 N. Farm Road 61, Ash Grove, MO 65604 • mdc.mo.gov/andydalton

DISCOVER

August Events

Dove Hunting Clinic

August 27 • Saturday • 8:30 AM-2 PM

Registration required (all ages)

Join us to learn the most effective methods for dove hunting. We will discuss the biology of the bird and then teach you how to wing shoot using the Effective Wing Shooting For The Hunter techniques. We will discuss using decoys and how to use concealment to your benefit.

Dove Hunting

Hunting is a great way to spend time discovering nature. It provides an opportunity for people to not only connect with and enjoy our natural resources, but to be an active participant in the wildlife management process and know where some of their food comes from.

One of my favorite activities in the fall is mourning dove hunting. It provides an opportunity for families to spend quality time together afield and sometimes prepare to hunt for the first time. This may include taking hunter education to purchase permits and what better way to connect and share time with a young person in your life than in an educational program? Once the hunter-education certification is completed, where do you go next to learn about dove hunting? While friends and family are great resources, another opportunity is participating in the *Dove Hunting Clinic* (see description above).

In 2007 on Missouri's conservation areas, hunters fired 5 to 6 shotshells per mourning dove bagged. If we use this formula, it takes between 3 and 4 boxes of shotgun shells to harvest a limit of 15 mourning doves. At a conservative estimate of \$5 per box of shells, a limit of mourning doves can get expensive fast. The secret to having better success is to shoot your shotgun early so you become more proficient with it before the season begins. Since wing shooting is a skill that requires good eye-hand coordination, you must practice in order to achieve and maintain your level of proficiency. Here are some tips.

Tip 1: Pattern test your shotgun, choke, and load combination to ensure you have a pattern density that is rich enough to deliver the lethal strikes necessary for quick, clean, kills. **Tip 2**: Learn and use the "swing-through" method while hunting so you don't have to do the math in your head about speed, distance, or angle of the bird. Tip 3: Practice mounting the shotgun to keep your head erect with both eyes open so your ability to estimate distance and see movement is not hindered. The shotgun should touch your shoulder and your cheek simultaneously as you begin your gun movement. Tip 4: Keep your eye focused on the head of the bird so when you see the proper amount of forward allowance or lead between the barrel of your shotgun and the bird, you simply "slap" the trigger, firing the shotgun without thinking about it. **Tip 5**: Follow through with your gun swing and be sure to watch where the bird drops and mark that spot. **Tip 6**: If you are hunting with another person or a dog, send them toward the last location you marked for the downed bird. If your hunting partner is not able to go directly to the downed bird, have them come back toward you and then proceed again making small arches back and forth in increasing size until the bird is retrieved. **Tip 7**: Don't shoot at another mourning dove until you retrieve the last downed bird because this causes confusion and leads to lost birds. Remember if you lose a bird it counts towards your daily bag and possession limit. **Tip 8**: Be selective about taking shots. There are lots of mourning doves and you can afford to be selective about taking "high percentage" shots. Tip 9: Always try to take shots where the birds are silhouetted by sky so that you don't have to worry about shooting low. **Tip 10**: Be sure to take a cooler with some ice to hold your birds while hunting in hot weather.

Some other common sense tips include drink plenty of water, use sunscreen and bug spray, wear camouflage clothing, and remain vigilant of other hunters' actions while afield this fall. For more information about free workshops, programs, and events held at the Andy Dalton Shooting Range and Outdoor Education Center, visit < mdc.mo.gov/andydalton >. Be safe afield and good hunting.

Holiday Closing: July 4 • Independence Day

---Michael E. Brooks **Outdoor Education Supervisor**



Range and Outdoor Education Center, take US Highway 160 west of Willard, turn south on Farm Road 61, and go 2.5 miles, facility on the west side of road. Facilities include an outdoor education center and archery, rifle, pistol, and shotgun ranges, including skeet and trap.

HOURS:

September 14-April 14

Monday and Thursday: 9 AM-4:30 PM

Friday-Sunday: 12 NOON-4:30 PM

April 15-September 13

Monday: 9 AM-4:30 PM Thursday: 9 AM-7:30 PM

Friday-Sunday: 12 NOON-4:30 PM

Closed Tuesdays, Wednesdays and all state holidays. Hours are subject to change.

FACILITIES AND FEES:

Available for individual and group use. Call for information and possible restrictions.

- Rifle/pistol range fee: \$3 per booth per hour
- Trap/skeet range fee: \$3 per person per round of 25 clay targets
- Shotgun patterning range: \$3 per person per hour
- Archery range: \$3 per person per hour
- Group use fee: \$20 per hour plus \$3 per round of 25 clay targets

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-742-4361** or email <DaltonRange@mdc.mo.gov> to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/springfield





The Springfield Conservation Nature Center is located in southeast Springfield just west of US-65 off the James River Freeway (US-60). Indoors, enjoy nature exhibits, attend programs, purchase hunting and fishing permits, browse through a nature-related gift shop, and pick up free conservation brochures. Outdoors, enjoy three miles of hiking trails through a variety of natural communities. Call to schedule a naturalist-led program for your organized group.

CURRENT HOURS:

March 1-October 31

Building: Tuesday-Saturday: 8 AM-5 PM

Sunday: 12 NOON-5 PM

Closed Mondays and state holidays

Trails: Sunday-Saturday: 8 AM-8 PM

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-888-4237** to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

July Events _

Primitive Skills Series Making Cordage

July 10 • Sunday • 1–3 PM

No registration required

Volunteer Naturalist and primitive skills specialist Don Brink demonstrates how to weave plant fibers into cordage. Try your hand at this age-old skill and learn about the plants primitive man used to make cordage. Stop by anytime.

Tree Pest Clinic

July 12 • Tuesday • 9 AM—1 PM No registration required

Do your trees have disease or insect problems? Bring infected twigs (at least 12" long), branches, or leaves to Urban Foresters for identification and a solution to your tree problems. Stop by anytime.

Little Acorns programs are listed on page 5.

July Events_

Nature Smart-All About Amphibians

July 12 • Tuesday • 10 AM-2 PM

No registration required

From tiny spring peepers to the large, hellacious-looking hellbender, we share our state with more than 40 species of amphibians. Stop by anytime to meet some live amphibians and learn about their amazing lives through activities, games, and crafts.

Family Fishing Fun

July 13 • Wednesday • 6–9 PM
Registration begins July 1 (ages 8 and up with an adult mentor)

Parents, grandparents, and adult mentors, bring your youngster(s) and meet at the Bois D'Arc Conservation Area fishing pond for an evening of fishing. You may bring your own fishing equipment or use ours; we'll supply the bait. A fishing permit is required for Missouri residents ages 16 to 64 and nonresidents ages 16 and up.

Beginner Archery

July 15 • Friday • 9–10:30 AM OR 10:30 AM–12 NOON

Registration begins July 1 (ages 10–adult)
You don't have to be a hunter to become a skilled archer. Learn a new skill and spend time practicing.
No experience is necessary and archery equipment will be provided. This program takes place on the archery range which is not ADA accessible.

Take A Hike

July 16 • Saturday • 8:15 AM—12 NOON Registration begins July 1 (ages 18—adult) Hike at Busiek State Forest and Wildlife Area with Volunteer Naturalist Pat Stritzel. Meet at the nature center and carpool. Bring water and snacks and wear comfortable hiking shoes. Hike is three miles and rated moderate in difficulty.

Venomous Snakes Of Missouri

July 16 • Saturday • 2–3 PM

No registration required

You've heard the tales about them, now's your chance to learn the truth. We'll explore the myths and realities of Missouri's misunderstood pit vipers.

Venomous Snakes On Display

July 16 • Saturday • 3–4 PM No registration required

Come see live specimens of Missouri's venomous snakes on display courtesy of Finley Valley Serpentarium. Stop by anytime.



Nature Smart-All About Insects

July 19 • Tuesday • 10 AM-2 PM
No registration required

Insects are a fascinating and diverse group of animals. Learn how to identify some insects by sight and sound and about their interesting life cycles during this fun event for all ages. Enjoy a 30-minute presentation on *Butterfly Magic* by the Fishin' Magicians at 10:30 or 11:30 AM.

Conservation TEENS-Float Trip

July 21 • Thursday • 9 AM—4 PM

Registration begins July 1 (ages 12–17)

Come along as we float and explore one of the many streams in the Ozarks. Drinks, lunch, and transportation will be provided.

Ozark Trail Adventure Workshop

July 23 • Saturday • 10 AM—4 PM
Registration required (see below for details)
The Ozark Trail Association (OTA) is sponsoring a Trail
Adventure Day. A National Recreational Trail, the Ozark
Trail is 360 miles through the most scenic areas of
the Missouri Ozarks. Learn about the trail, its history,
and volunteer opportunities. Choose from a variety
of breakout sessions including backpacking, cycling,
horseback riding, geocaching, map reading, and
hiking with children. To register and for details about
this day-long free workshop, visit OTA's website at
<0zarkTrail.com/events.php> or call the nature center.

Nature Smart-All About Rodents

July 26 • Tuesday • 10 AM-2 PM
No registration required

Rodents are more than just rats. They're found in forests, prairies, wetlands, and deep below ground. Learn about the cool adaptations rodents have to survive in the different ecosystems of Missouri. Stop by anytime.

Conservation Kids Crustacean Sensation

July 28 • Thursday • 7–8:15 PM Registration begins July 1 (ages 7–12)
Get a "taste" for crustaceans as you meet (and eat!) the lowly crayfish. Learn about this crusty crustacean through activities, games, and exhibits. Bring a prewashed piece of cotton (or any cloth material) to paint with crayfish stamps. Please, no younger siblings and only one adult per group of kids.

Nature Art With A Chinese Brushstroke

July 29 • Friday • 1–2:30 PM OR 2:45–4:15 PM Registration begins July 1 (ages 8–adult)
Art instructor and nature enthusiast Hing Wah Hatch will increase your powers of observation as she demonstrates, step-by-step, how to capture the essence of local plants and animals through Chinesestyle painting. Participants will go home with more nature knowledge and their own artistic masterpiece. Observers are welcome to stop by anytime.

Springfield Conservation Nature Center

4601 S. Nature Center Way, Springfield, MO 65804 • mdc.mo.gov/springfield

Little Acorns

Please limit to one per month.

Programs are 45 minutes in length.

July Events

Registration begins July 1 (ages 3–6)

Slithery Snakes

July 16 • Saturday • 11 AM July 28 • Thursday • 9:30 AM, 11 AM, OR 1:30 PM Kids, slither in and get up close and personal with nature's most misunderstood reptile.

Busy Beavers

July 21 • Thursday • 9:30 AM or 11 AM How are beavers able to live in the water? Why are they so busy? Discover the answers to these questions and learn more about this remarkable water-loving animal.

Roadrunners . . . Beep, Beep!

July 27 • Wednesday • 9:30 AM or 11 AM Greater roadrunners are more than just a cartoon, so run in and learn about this really cool bird. Beep, beep!

August Events

Cool Cave Creatures

August 5 • Friday • 11 AM OR 1:30 PM Registration begins July 15 (ages 3–6) Don't be in the dark about cool cave creatures and features. Join the fun as we go "underground" to see what life in a cave is all about.

Ant Antics

August 6 • Saturday • 11 AM August 12 • Friday • 9:30 AM OR 11 AM Registration begins August 2 (ages 3–6) Have fun as we explore the antics of these tiny insects and then create an "antsy" craft to take

Butterfly Magic

August 23 • Tuesday • 9:30 AM OR 11 AM August 27 • Saturday • 11 AM Registration begins August 2 (ages 3–6) Butterflies grow up in a magical way. Join us and travel through the butterfly's life cycle-from its humble beginnings to its glorious finish!

Temporary Exhibits

July

Missouri Junior Duck Stamp Contest

August

Luna De Las Polillas (Moon of the Moths) Paper Mache Insects by Joyce Haynes

Insect Art

by Donna Brunet

August Events _

Take A Hike

August 6 • Saturday • 8:15 AM-5 PM Registration begins August 2 (ages 18-adult) Hike Hercules Glades Wilderness with Volunteer Naturalist Mike Mihalik. One mile of this hike will be wading through a creek to cool off so pack water shoes. Meet at the nature center and carpool. Bring a sack lunch and water and wear clothes you can get wet and sturdy shoes. Hike is approximately five miles and rated moderate to difficult.

Conservation TEENS-Snorkeling

August 10 • Wednesday • 9 AM-5 PM Registration begins August 2 (ages 12–17) Come beat the heat and experience a fish-eye view of an Ozarks creek. No prior snorkeling experience is necessary. Transportation and lunch will be provided. You may bring your own mask and snorkel or use ours.

Story Time With Ms. Ladybug

August 10 • Wednesday • 11–11:30 AM *No registration required (ages 2–6)* Join Volunteer Naturalist Joyce Tolliver as she reads a nature story and shares activities with your 2-6 year olds. Please, no organized groups.

Conservation TEENS-Insect Collecting

August 17 • Wednesday • 6-9:30 PM Registration begins August 2 (ages 12–17) Bugs, bugs! Come join the fun as we go insect hunting. Insects will be collected and identified. Meet at the nature center where dinner and drinks will be provided.

Insect-O-Rama

August 19 • Friday • 6:30-9:30 PM No registration required

Our annual celebration of insects and the important role they play in nature returns! Insects—they fascinate us, they bug us, they surround us, and they bite us, but what would a summer evening be like without them? Join insect specialists, biologists, artists, and enthusiasts for an evening devoted to discovering insects. Grab your entire family and participate in some creepy-crawly fun for all ages.

The Art Of Woodcarving

August 27 • Saturday • 11 AM-12 NOON No registration required

Try your hand at woodcarving with members of the Southern Missouri Woodcarving Artists as they teach carving techniques and show how to transform wood into works of art.

Woodcarving Demonstration

August 27 • Saturday • 1–4 PM No registration required

Visit with members of the Southern Missouri Woodcarving Artists as they share information with the "wood-be" carver, demonstrate carving techniques, and show works in progress.

Summer Hummers

August 28 • Sunday • 5-6:30 PM Registration begins August 2 (all ages) Join hummingbird bander Sarah Driver as she shares her knowledge about Missouri's smallest bird and attempts to capture and band some.



Shepherd of the Hills Fish Hatchery and Conservation Center

483 Hatchery Road, Branson, MO 65616 • mdc.mo.gov/shepherd



The Fish Hatchery and Conservation
Center is located on 221 acres in Branson
off Highway 165 next to Table Rock
Dam. Outdoors, visitors will experience
an active fish hatchery with 700,000
rainbow and brown trout in 30 pools with
opportunities to feed the fish. Indoors,
enjoy a 3,500 gallon aquarium and handson nature exhibits and purchase hunting
and fishing permits. The area also features
four hiking trails, a picnic area, a boat
ramp, and access to Lake Taneycomo.

FACILITY HOURS:

June-July-August: Sunday-Saturday: 9 AM-6 PM

Remainder of Year Sunday–Saturday: 9 AM–5 PM

Closed all state holidays

AREA AND TRAIL HOURS:

4 AM-10 PM

The area is open to fishing 24 hours daily, but special permits and regulations do apply. Check the current fishing regulations or call for details.

TO REGISTER FOR A PROGRAM:

Programs are free. Call **417-334-4865**, Ext. 0, to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

FISHING LAKE TANEYCOMO:

Before fishing on Lake
Taneycomo, become familiar
with the regulations and
restrictions. Come by for a free
brochure of the entire lake including fishing accesses. For specific
details about trout fishing here
and across the state, visit
<short.mdc.mo.gov/Zkh>.

July and August Events_

Nature Journaling

July 8 • Friday • 7–8:30 PM

Registration required (families, ages 12 and up) Journaling is a wonderful way to create lasting memories and find detail in nature. This class will help you start a journal with the basics of writing and sketching. Each family will receive one free journal. Be prepared to take a short hike outdoors after a brief indoor introduction.

Feral Hogs In Southwest Missouri

July 29 • Friday • 7–8 PM

Registration required (families, ages 12 and up)
Join Conservation Department Wildlife Biologist
James Dixon to find out where feral hogs came
from and how much damage they can do in
southwest Missouri. He will let you know the latest
methods that are being used to eliminate this
invasive species.

Asian Carp

August 6 • Saturday • 10 AM—2 PM No registration required

Here is your chance to get the scoop on how Asian carp got into our state waters. You will also learn what they do that makes them an unwelcome part of our aquatic ecosystem. Best of all, we will offer samples of Asian carp to eat. Don't be surprised that you find them tasty.

Wild Edibles Of The Civil War

August 13 • Saturday • 7–8 PM

Registration required (families, ages 12 and up)

Join us as we go back in time to discover what
plants and animals were used for food by soldiers
and citizens over 150 years ago. You will be
amazed at the variety of foods upon which people
relied. In addition to an indoor portion, we will
take a short hike to find some of these wild edible
plants that are still food for humans today. Bring a
bottle of water and hiking shoes.



Flying With Your Hands

As the sun goes down and the temperatures begin to cool, it is a great time to be outside. When you look up at the stars, you may see silhouettes of tiny flying critters in the night sky. These welcome sights are our only true flying mammals—bats.

Luckily, most people appreciate that bats are patrolling the evening sky for a variety of insects including mosquitoes. Amazingly, bats can eat as much as one third of their body weight each night in insects. That is the same as a 100-pound human eating 33 pounds of pizza each night!

By using their unique sonar to locate their food by echolocation, they are efficient hunters of flying insects. Bats eat on the fly by using their hands for both acrobatic flight and to put food in their mouths. Looking at the fine, bony structure of a bat wing, you will see that the wing is actually the hand of a bat. Bats belong to a group of mammals called Chiroptera which means "hand wing." So when they eat mosquitoes, it is truly finger-licking good!

In return for removing insect pests by the thousands each night, bats require only a few things from us. They need large native trees for roosting, areas free of pesticides, and not to be disturbed when roosting. Bats make good neighbors and rarely carry rabies. If you ever encounter a bat on the ground or on a window ledge, do not touch it. Leave it alone and let it move on its own. Finally, if you are able to provide a bat roosting box, you will have an even better chance of enjoying bats and their benefits. Plans for a variety of bat boxes can be found at <<u>batcon.org/resources/getting-involved/bat-houses</u>>.

To learn more about bats, threats to their health, and how they help our environment, visit <<u>short.mdc.</u> <u>mo.gov/Zkd</u>>. Continue to scan the night sky for these winged wonders and be assured that they are great neighbors.

—John Miller, Interpretive Center Manager

—Joini Miller, linterpretive Center Mil

Holiday Closing: July 4 • Independence Day

Southwest Regional Office 2630 N. Mayfair Avenue, Springfield, MO 65803 • mdc.mo.gov/southwest



Identification and Precautions

The noxious aquatic weed hydrilla has been found in several small impoundments in southwest Missouri. Currently, these impoundments are located within the James River, Pomme de Terre, Little Sac, and Niangua watersheds. All known hydrilla locations are under a treatment plan and nearby aquatic resources such as rivers and lakes are being inspected regularly for the plant.

Hydrilla can be identified by the following characteristics:

- A submerged, rooted plant with whorled leaf pattern with 3 to 8 leaves per whorl, mostly whorled in fives.
- Leaves are narrow and have serrated margins.
- Leaves are roughly 1/16 to 1/8 of an inch wide and 3/8 to 3/4 of an inch long.
- Branching is normally limited until the plant is close to the water's surface.
- Leaf mid-rib is often red.
- Most reliable identification is the potato-like tuber attached to the roots.

Please take the following precautions to prevent the spread of hydrilla and other aquatic invasives.

- **Clean**: When leaving a body of water, remove all mud, plants, fish, or animals before transporting your equipment. Thoroughly clean all fishing gear including boats and trailers after each trip.
- **Drain**: Eliminate any water from your equipment before leaving the area that you visited. Always drain water from boats, motors, live wells, etc.
- **Dry**: Dry anything that comes in contact with water.



—Kara Tvedt, Fisheries Management Biologist



The Southwest Regional Office is conveniently located just west of the intersection of US-65 and Kearney in Springfield. The public may obtain information on land management, nuisance wildlife, educational opportunities, river and pond management, and more, as well as purchase hunting and fishing permits and obtain area brochures for Conservation Department areas.

HOURS: Monday-Friday: 8 AM-5 PM Closed all state holidays

PHONE: 417-895-6880

Hunter Education Sessions

Reminder

Hunter-education certification has two parts: knowledge and skills. You must complete and pass BOTH sessions to earn your certificate. For more information on Hunter Education, contact your local Missouri Department of Conservation office or visit the **Conservation Department website** at <<u>short.mdc.mo.gov/Zkg</u>>.

Knowledge (Classroom) Sessions

Rowhunter Education	
Andy Dalton Shooting Range	August 6 • Saturday • 8 AM—12 NOON
	August 13 • Saturday • 8 AM—12 NOON or 1—5 PM
Springfield Conservation Nature Center	July 9 • Saturday • 8 AM—12 NOON or 1—5 PM
Location	Date/Time
Skills Sessions	August 12 • Friday • 6—10 PM
Springfield Conservation Nature Center	• •
Location	Date/Time

BOWNUNTER Education

Location	Date/Time
Andy Dalton Shooting Range	

Visit <short.mdc.mo.gov/ZkY> to register for these sessions and to check for session changes and/or other locations.

Insect-O-Rama

at the
Springfield Conservation
Nature Center

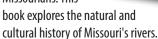
August 19 • Friday
6:30–9:30 PM

Cecropia moth
Cecropia moth

The nature center's annual celebration of insects and the important role they play in nature returns! Insects—they fascinate us, they bug us, they surround us, and they bite us, but what would a summer evening be like without them? Join insect specialists, biologists, artists, and enthusiasts for an evening devoted to discovering insects. Grab your entire family and participate in some creepy-crawly fun for all ages.

20% Off Special

Clean flowing water in our rivers is vital to sustaining the lives of all Missourians. This



Featured Publication for July and August

Available at the Springfield Conservation Nature Center and Southwest Regional Office.



___ Friend



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Missouri Department of Conservation 🕭



Conservation Showcase:

Capps Creek Conservation Area

Many conservation areas are known for a dominant habitat feature or certain fish or animal species. Capps Creek Conservation Area (CA) in eastern Newton County, however, is characterized by a variety of wildlife habitats and an even greater variety of outdoor recreation opportunities.

Capps Creek CA covers 721 acres in the Springfield Plateau Section of the Ozark Natural Division. The area includes abundant stream resources, about 200 acres of woodlands, over 400 acres of grasslands or old fields, a variety of small crop fields, and even a 5-acre wetland that floods seasonally depending on the water level in Capps Creek. The grasslands on the area have been largely restored to native grass species and are managed with a combination of prescribed fire, light disking, and invasive species control. These areas provide habitat for bobwhite quail and rabbits and excellent nesting cover for a recovering wild turkey population. Woodlands are managed with timber stand improvement to increase tree health and mast production and prescribed fire to increase the amount of herbaceous vegetation at the ground level. This improves brood-rearing habitat for wild turkeys—a critical component for increasing wild turkey numbers. Crop fields are maintained through sharecropping agreements with a local farmer with an emphasis on sound soil conservation and maximum wildlife benefit. Various food plots are also planted including an excellent sunflower management program. Stream and riparian resources on the area include approximately 0.4 miles of both banks of Capps Creek, another 1.4 miles of Capps Creek on one bank, and 0.2 miles of the right downstream bank of Shoal Creek.

LOCATION: Capps Creek CA is located 7.5 miles west of Monett on Highway 60 then 1.75 miles south on Wallaby Road to its junction with Jolly Mill Drive.

HISTORY: Capps Creek CA was purchased by the Missouri Department of Conservation (MDC) in the early 2000s and was part of a large dairy farm prior to MDC ownership. The area sits across the road from Jolly Mill. Built in 1848, Jolly Mill originally served as a whisky distillery and was later converted to a grist mill. The mill is still operated periodically to grind corn and is open daily as a recreational park.

HUNTING: Hunting is allowed for a variety of species. Statewide seasons and limits are in effect for quail and rabbit, while firearm turkey hunting is allowed only during the spring season. Deer hunting is quite popular on the area and is allowed with archery or muzzleloading equipment only. Quality duck hunting can be found on the area during snaps of extremely cold weather when waterfowl are forced to use the running water provided by Capps and Shoal Creeks. Dove hunting on the area can be excellent due to the approximately 20 acres of managed sunflower and wheat fields planted each year. Bird numbers depend on a variety of factors including reproductive success, crop conditions, and migratory status. Because the area is known for dove-hunting opportunities, hunters should expect heavy pressure on opening morning and exercise caution accordingly. For more information on area-specific hunting regulations, please consult the *Wildlife Code of Missouri*.

FISHING: Capps Creek, which flows westward to Shoal Creek, receives most of its year-round flow from springs, creating a cold water stream that has provided trout management opportunity to MDC for more than 30 years. Rainbow and brown trout are stocked from October through May annually and provide excellent fishing in the deep pools and undercut banks. Capps Creek is managed as a White Ribbon Trout Area. Smallmouth bass can be found in good numbers in Shoal Creek. A one-acre pond on the north side of the area is periodically stocked with largemouth bass, bluegill, and channel catfish. This pond represents the only stocked pond on the area. Consult the *Wildlife Code of Missouri* for further regulation information.

CAMPING, TRAILS, AND BIRDWATCHING: Camping is not allowed on the area. A system of field roads and fire lines serve as hiking trails or as access for hunting, fishing, and birdwatching. The variety of habitats found on the area yield a wide diversity of resident and migratory bird species. For a checklist of birds seen on the area, visit <ebird.org/ebird/hotspot/L342746>.

Visit < short.mdc.mo.gov/ZkD for more information on Capps Creek Conservation Area.

—Frank Loncarich, Wildlife Management Biologist